



# UNITED STATES PATENT AND TRADEMARK OFFICE

W  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,474	07/09/2003	David E. Pitcher	PITCHER-I	9612
7590	08/17/2004		EXAMINER	
Donald N. Halgren 35 Central Street Manchester, MA 01944			WONG, STEVEN B	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/616,474	PITCHER, DAVID E.
	Examiner	Art Unit
	Steven Wong	3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7-9-03.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

***Claim Objections***

1. Claims 1-18 are objected to because of the following informalities: in claims 1 and 10, the language “layer” appears to be inaccurate in describing the second and third layers. The language would seem to entail that the layers would be mutually exclusive of one another with no interengagement between the two. However, the second layer appears to comprise elements 46 and the third layer appears to comprise elements 50 and 62. These elements all appear to be on the same level and thus should be included as being the same layer and not second and third layers as the claims state.

Appropriate correction is required.

***Claims Rejections – 35 USC 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3711

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hewlett, Jr.

Regarding claims 1, 10 and 11, Hewlett, Jr. discloses an octahedral puzzle comprising an inner octahedral core member (column 2, lines 62-64), an inner core of tetrahedral members (column 3, lines 4-8) and an outward layer of octahedral and tetrahedral members (column 2, lines 65-68 and column 3, lines 1-3 and 9-19).

Regarding claims 2 and 12, note column 3, lines 25-31 stating that screws may be used for attaching the inner core to the core member.

Regarding claim 3, Ashley appears to teach for the interior tetrahedral to comprise triangular caps for radial securing to the core member.

Regarding claim 4, the edge octahedral members of Ashley are radially secured and are permitted rotation by the tetrahedral members.

Regarding claim 5, note column 3, lines 32-35 stating that the octahedral members have portions cut away for attachment purposes.

Regarding claim 6, note column 3, lines 44-46 stating that the exterior tetrahedral pieces have feet.

Regarding claim 7, note column 3, lines 32-39 stating that the other octahedral pieces have feet.

Regarding claim 8, upon having the screws attached to the octahedral core member, the core member will become an eight armed spider member.

Regarding claim 9, note Figure 5 wherein the core members and the inner tetrahedral members, when joined, formed an eight armed spider member with extensions (16, 17).

***Claims Rejections – 35 USC 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-7 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hewlett, Jr. in view of Ashley. Regarding claim 3, Ashley discloses a rotatable puzzle comprising an inner octahedral core member (note Figure 5), an inner core of tetrahedral members (23, 24, 72, 73) each rotationally attached to the one of the faces of the core member and a plurality of pieces that define the outermost layer of the puzzle. Note Figure 5 showing triangular caps for radial securement of adjacent members. It would have been obvious to one of ordinary skill in the art to provide the inner core of tetrahedral members of Hewlett, Jr. with a triangular cap as taught by Ashley in order to securely attach the pieces to the puzzle.

Regarding claims 4-7, note the rejections under 35 U.S.C. 102(b) stated above.

Regarding claim 13-18, Ashley teaches the use of curvilinear edges for slidable retention of pieces. Note Figure 5. It would have been obvious to one of ordinary skill in the art to provide the puzzle of Hewlett, Jr. with curvilinear edges in order to securely attach the pieces to the puzzle.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3711

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Wong whose telephone number is 703-308-3135. The examiner can normally be reached on Monday through Friday 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven Wong  
Primary Examiner  
Art Unit 3711

SBW  
July 19, 2004